Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NM04411

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NM 91055X pm

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
West Lovington Strawn Unit 4

2. Name of Operator
Energen Resources Corporation

9. API Well No.
30-025-32230

3a. Address
3300 N. A St., Bldg. 4, Ste. 100, Midland, Tx 7970

3b. Phone No. *(include area code)*
(432) 684-3693

10. Field and Pool, or Exploratory Area
Lovington; Strawn, West

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Section 33, T-15-S, R-35-E, Lea County
UL-N, 660' FSL & 1980' FWL

11. County or Parish, State
Lea NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[X] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[ ] Other
	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

See attached procedure.

See changes written on procedure.

MAY 2007 Received Hobbs OCD

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Carolyn Larson

Title
Regulatory Analyst

Date 5-7-07

APPROVED

MAY 8 2007

WESLEY W. INGRAM
PETROLEUM ENGINEER

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Chris Williams

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

ENERGEN RESOURCES CORPORATION

WLSU #4

660' FSL and 1980' FWL
Sec 33, T-15-S, R-35-E
Lea, Co. NM
West Lovington Field

Casing Tie-Back Procedure

Date: March 21, 2007

AFE No: PB030307
Cost: $649,500

WI: 89.98% NRI: 73.98%

TD: 11820' PBTD: 11772' KB: 3999' GL: 3981'

Surface Casing: 13-3/8" 48#/ft, H-40 Set at 385'.
Cemented w/440 sx class C.
Cement circulated.

Intermediate Casing: 8-5/8" 32#/ft, J-55 Surf to 4117'
S-80 4117-4732
Cemented w/1504 sx Class C.
Cement circulated.

Production Casing: 5-1/2" 17#/ft, S-95 Surf to 516
L-80 516-10695
S-95 10695-11816'
Cemented w/600 sx Class H
TOC at 9590'

Perforations: Strawn: 11532-76 88 Holes at 2 SPF (Squeezed 9-5-2001)

Strawn: 11587-93 24 Holes at 4 SPF

Casing Collapse: 5690'-5750', Swaged w/ 4-5/8" string mill. (3/10/07)

CIBP @ 11,450'

ENERGEN RESOURCES CORPORATION

WLSU #4

660' FSL and 1980' FWL
Sec 33, T-15-S, R-35-E
Lea, Co. NM
West Lovington Field

Casing Tie-Back Procedure

1. MIRU Pulling Unit.
2. RU wireline. RIH w/bailer. Dump bail 50' cement on top of CIBP at ~~11000'~~ 11450'.
3. RU Gray Wireline. Run Scientific Gyro-Survey from surface to 10,850' taking shots every 100'.
4. RIH w/open ended tubing. Tag cement plug. Circulate 9# plugging mud form ~~11000~~ 11400' to 8800. Spot cement plug from 9100 to 8900'
5. RU wireline. RIH w/GR/CCL log. Run log from 8700' to get on depth with Baker Atlas MicroVertilog run 3/20/07. RIH w/chemical cutter and chemical cut casing at 8780' (Casing collars at 8766' and 8808' MicroVertilog measurements).
6. RU casing jacks
7. RIH w/2-7/8" 4" drill pipe and casing spear. RIH and spear casing. Release casing from slips with casing jacks.
8. Install BOPE with 5-1/2" pipe rams.
9. POOH & LD casing.
10. RIH with 7-7/8" bit, 6-4" drill collars and 2-7/8" N-80 tubing to top of cut off casing. Circulate well with gel sweeps. POOH.
11. RIH w/concave mill, 6-4" drill collars and 2-7/8" N-80 tubing to top of cut off casing and dress off casing stub. Circulate well with gel sweeps. POOH.
12. RU casing crew. RIH with casing bowl assembly, latch-in sub and 5-1/2" 17# N-80 casing. Externally wrap casing from 7700' to 4500'. Circulate while going in hole
13. Latch onto casing stub at 8780'. not to be used
14. Cement casing per service company recommendation. Cement to extend min. of 200' into intermediate casing.
15. Set casing in tubing head
16. WOC
17. RIH w/bit, DC's and tubing. Tag cement. Pressure test casing to 1000 psi.
18. Drill out cement, float and cement plug @ 8900'. Pressure test casing to 1000 psi.
19. RIH to CIBP set at ~~11000'~~ 11450'. Drill out CIBP.
20. RU wireline. RIH w/3-1/8" Slick gun w/3 SPF 120° phased Owen 4000-311T charges. Perforate Strawn from 11556-76', 11532-52, 11496-11516' and 11480-11485'. POOH. Total shots 210. POOH. (Correlated to Schlumberger Borehole Compensated Sonic Log dated 10-24-1993).

ENERGEN RESOURCES CORPORATION

WLSU #4

660' FSL and 1980' FWL
Sec 33, T-15-S, R-35-E
Lea, Co. NM
West Lovington Field

Casing Tie-Back Procedure

21. RU & RIH w/ a set of 5 1/2" **24 ft** spaced PPI tools, a downhole shut-off valve & the 2 7/8" tubing down below the bottom perforation (>11,593') & prepare to acidize w/ a total of **8.0M** gallons of 15% HCl acid w/ predetermined additives in **5** PPI settings.

22. RU Schlumberger, reverse flush the tubing w/ 55-60 barrels of 2% FKCLW @ 1 1/2 BPM, RU a JU stripper, drop the standing valve, set the packers in the blank casing & test the tubing & PPI tools to 3,500#.

23. If the tools & tubing test good, release the packers, load the tubing w/ 15% HCl acid w/ additives, spot 3 barrels of acid outside the tools, SD & let the new spot acid soak a minimum of 30 minutes.

24. Tag up on the RBP @ 11582', Space out & locate the bottom perforated interval from 11587-93', pump a minimum of 1,000 gallons of the 15% HCl acid into formation @ the maximum rate that 3M# will allow (Estimate 6-8 BPM).

25. Continue pulling up locating each of the 8 to 20 ft perforated intervals, pumping 100 gallons of 15% HCl acid per ft of interval @ each setting (i.e. 5 ft of interval = 500 gallons ... 20 ft of interval = 2,000 gallons), while pumping @ the maximum rate that 3M# will allow. You should have some spare acid, plan to pump the extra on any of the tight settings or split it up between the last few settings.

26. Be sure to record the breakdown pressures, the injection rates & pressures and also note if & when there was any up-hole communication observed while pumping @ each setting.

27. Over-flush the acid on the last setting by 5-6 barrels w/ 2% FKCLW, close the downhole shut-off valve, release the PPI packers & pull the EOT up to 11,350'+/-.

28. RU Schlumberger on the casing, pump 15-20 barrels of 2% FKCLW down the casing @ 3-4 BPM, record the Instant through 15 minute tubing pressures, ND the JUS, set the packers, open the downhole shut-off valve & RD Schlumberger.

29. Open the tubing to the test tank, flow the well back until dead then fish the standing valve.

30. RU the swab-tools, inspect the swab-mandrel no-go to insure that it is in full-gauge, plan on using 2 load/wire cups & commence swabbing to recover the acid load ASAP to determine the entry rate & oil cut after the acid treatment.
    Note: Always use a full opening master valve to swab through.

31. Once the well has been evaluated for commercial production & an acceptable entry rate, oil cut & fluid quality have been achieved, release the PPI packers, POOH w/ the tubing & LD the BHA.

32. RIH w/production string. (Flow or pumping)

33. RD pulling unit.

34. Set Pumping unit if needed

ENERGEN RESOURCES CORP

WLSU #4

(Formerly Hamilton Federal No. 4)

LEA COUNTY, NM

GL Elevation: 3981'

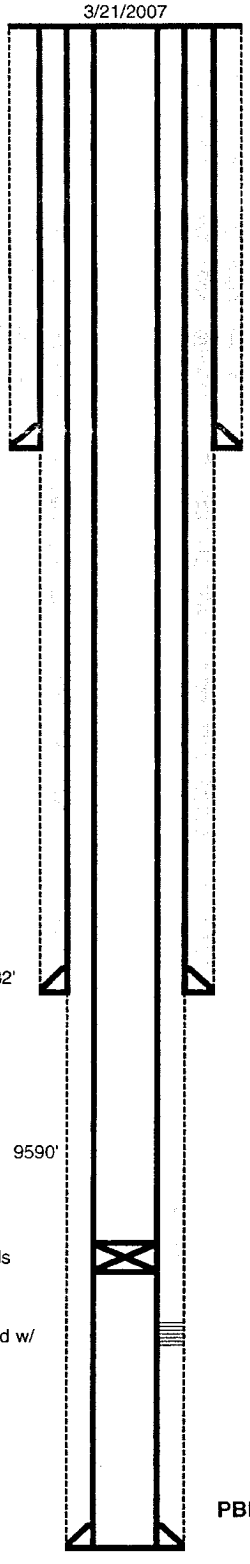
KB Elevation: 3998.5' -- 17.5' above GL

Location: 660' FSL X 1980' FWL
Sec 33-15S-35E

Spud: 09/26/1993

API : 30-025-32230

Current Condition Flowing
3/21/2007



Conductor:
None

Surface Casing:
13-3/8" 48#, H-40 @ 385'
Cemented to surface
with 440 sx Class "C" w/2% CaCl2
(Circulated 25 sx)

Intermediate Casing:
8-5/8" 32#, S-80 & J-55 @ 4732'
(L) 1304 sx Class "C" Lite w/ 1%
Gilsonite & 3% salt
(T) 200 sx Class "C" w/1% CaCl2
(Circulated 225 sx)
TOC: Surface'

Casing Collapse: 5690' - 5750'
Swaged w/ 4-5/8" string mill.

Production Casing:
5-1/2" 17# ,S-95 & N-80 @ 11,816'
Preflushed w/ 500 gals WMW& 500gals
Surebond
cmt w/ 600 sx Class "H" w/ 3% KCl,
'0.2% CF-2 & 0.8% CF-14. Displaced w/
272 BW.
TOC: 9590'

CIBP @ 11,450'

Strawn Perfs: 11,532-11,76' w/Vann gun system (2 spf) Squeezed Perfs 9-2001

Strawn Perfs: 11,587-11,593'

PBD: 11,758'

TD: 11,810'

rlandon4/4/2007